UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,350	10/11/2001	Martin J. Jacobs	CP215	9510

27573 7590 04/24/2006

CEPHALON, INC.
41 MOORES ROAD
PO BOX 4011
FRAZER, PA 19355

EXAMINER	
FUBARA, BLESSING M	
ART UNIT	**PAPER NUMBER**
1618	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/975,350	JACOBS ET AL.	
	Examiner	Art Unit	
	Blessing M. Fubara	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,8-51 and 55-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,8-51 and 55-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of request for reconsideration and request for extension of time filed 1/31/06, terminal disclaimer filed 1/04/06. The amendment filed after the final rejection is entered with the request for reconsideration. Claims 1-4, 8-51 and 55-58 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 1/31/06 has been entered.

Claim Rejections - 35 USC § 112

2. The rejection of claims 1-5 and 7-58 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in view of the amendment to the claims obviating the new matter rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 32, 33, 36, 37, 39, 41-44, 47, 48, 51 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Grebow et al. (US 5,618,845).

Grebow teaches a pharmaceutical composition comprising modafinil particles or modafinil pharmaceutically acceptable salt particles (abstract, column 2, column 3, lines 1-55 and claims 1 and 2) and non-toxic pharmaceutically acceptable carrier (column 4, lines 4-1%. Grebow's composition contains an appropriate dosage of between 50 mg and 700 mg of modafinil with a preferred amount of 400 mg (column 4, lines 1 1-18 and column 10, lines 15-17). The modafinil pharmaceutical composition is administered as a tablet, capsule, powder, pill, liquid, suspension or emulsion; the modafinil composition can also be administered topically via epidermal patch or administered via direct injection (column 10, lines 18-26). Grebow further teaches a method of altering somnolent state, for example, narcolepsy, idiopathic hypersomnia and related sleep disorders by administering to a mammal a pharmaceutical composition comprising an effective amount of modafinil particles; and an effective amount of the pharmaceutical composition is defined as an amount effective for treating the somnolent state (column 3, lines 56-67). In human clinical trials, modafinil is administered to physically and mentally healthy male subjects (column 5, lines 46 to 56).

The composition of Grebow encompasses stable and unstable suspensions because the prior art does not exclude stable suspensions and thus the suspension of Grebow would be inherently stable. It is also noted that Grebow discloses suspensions containing modafinil and in the suspension modafinil is not crystalline and the particles of modafinil are suspended in the solvent. Grebow clearly teaches the composition and methods of the application recited in the claims designated above. Therefore, the teachings of Grebow meet the limitations of the claims.

5. Claims 1-4, 6, 7, 11, 14, 15, 32, 33, 36, 37, 39, 47 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Nguyen et al. (US 5,843,347).

Nguyen teaches a pharmaceutical composition comprising particles or microparticles of active ingredient, physiologically acceptable hydrophilic excipient and water (abstract). The hydrophilic excipient comprises a polymer component and a water-soluble or water dispersible component that acts as a diluent (column 6, lines 1-5). The polymer component is selected from the group consisting of gum Arabic, xanthan gum, gum tragacanth, alginates, pectinates, polyvinylpyrrolidone, polyethylene glycols, cellulose, carboxymethyl cellulose, cellulose ethers, carboxymethyl chitin, dextran, chitosan, gelatin, acrylic and methacrylic polymers and copolymers, colloidal silica and mixtures thereof (column 6, lines 11-23). The water-soluble or water dispersible component is selected from the group consisting of lactose, glycocoll, mnnnitol, glucose, sucrose, maltodextrin, cyclodextrins and derivatives thereof (column 6, lines 44-49). The hydrophilic excipients can also comprise surfactants that are capable of oral administration and the surfactants can be polysorbates, sorbitan esters, fatty glyceride polyethers, lecithins, sodium lauryl sulfate, sodium dioctylsulfosuccinate and mixtures thereof (column 7, lines 2-7). The process of preparing the modafinil particles involves homogenization of the active ingredient in solution, suspension, or emulsion and freeze-drying or lyophilization (column 8, lines 15-24). The active ingredient is selected from the group consisting of paracetnmol, probucol, piroxicam, phloroglucinol, tiadenol, flerobuterol, modafmil, dexfenfluramine, carbinoxamine maleate, loperamide, lorazepam and mixtures thereof (claim 13). Oral administration is route of administration and route of administration of a composition is does not patentably distinguish the claimed composition over the prior art.

Nguyen does not exclude stable emulsion, Nguyen does not teach that the emulsion is unstable. However, and since Nguyen homogenizes and lyophilizes the emulsion, the lyophilized product would be stable. The composition of Nguyen contains polyethylene glycol and the polyethylene glycol meets the limitation of the claimed solvent. The method steps in claims 36 and 37 broadly contacts modafinil particles with water and the composition of Nguyen contains water. Thus Nguyen clearly teaches the composition and the methods of the application in the claims designated above. Therefore, the teachings of Nguyen meet the limitations of the claims.

Claim Rejections - 35 USC § 103

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 17, 18, 34, 35, 38, 45, 46, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grebow et al. (US 5,618,845).

The teachings of Grebow are as described above where it is noted that the appropriate dosage of modafinil is between 50 mg and 700 mg with a preferred amount of 400 mg (column 4, lines 11-18 and column 10, lines 15-17). The dose or amount of modafinil in the composition of the application recited in claims 17, 18, 34 and 35 is encompassed in the amounts

disclosed by Grebow. Grebow also teaches administering the prior art composition in clinical trials to mentally and physically healthy male subjects. Orally administering modafinil particles to human subjects (column 5, lines 46-56) would necessarily bring modafinil particles in contact with the aqueous environment in the human subject since human body is mostly water. Claim 3 of the application does not recite any dose and claims 45 and 46 depend from claim 3. But the dose/amount of modafinil administered to a subject in need thereof in the prior art is effective for treating the somnolent state, and thus modafinil would be present and capable of detection in the blood serum of said subject because, for a drug to be effective, it has to be present in the blood circulation. In the absence of a showing to the contrary, modafinil blood serum levels of 0.05 to 30 μg/ml do not patentably distinguish the invention over the prior art. Thus, Grebow clearly teaches the composition and methods of the application except that the prior art is silent on the form of the capsule. Since the prior art is silent on the form of the capsule, hard or soft gelatin capsule, the prior art's broad teaching of a capsule encompasses both soft gelatin capsule or hard capsule. The expected result would be a modafinil particle composition encapsulated in soft gelatin capsule or hard capsule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encapsulate the modafinil particle composition in hard capsule or soft gelatin capsule because the prior art broadly teaches capsules and capsules can either be soft or hard. One having ordinary skill in the art would have been motivated to encapsulate the composition of the prior art in soft gelatin capsules or hard capsules since the prior art does not exclude either form of the capsule.

8. Claims 8-10, 12, 13, 16, 17-31, 34, 35, 38 and 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Lafon (US 5,180,745).

Nguyen is discussed above. However, Nguyen fails to teach administering the composition to a subject in need thereof to treat any of the conditions recited in claim 44. But, Lafon teaches a method of treating Parkinson's disease where the method comprises administering to a patient in need thereof a therapeutically effective amount of modafinil (claim 1). For modafinil to be effective in treating Parkinson's disease, the modafinil administered must be carried by the blood to the target areas, which implies that the level of modafinil in the blood serum is effective for treating the Parkinson's disease. In the absence of a showing to the contrary, modafinil blood serum levels of 0.05 to 30 μg/ml do not patentably distinguish the invention over the prior art.

Parkinson's disease is one of the conditions recited in claim 44. Lafon teaches that the dose administered to humans varies from 50 mg to 1000 mg (column 1, lines 33 and 34). The dose of 200 mg and 100 mg recited in claims 34 and 35 lie within the disclosed range of 50-1000 mg. It would have been obvious to one of ordinary skill in the art at the time the invention was made to orally administer the composition of Nguyen to treat Parkinson's disease because Lafon administers modafinil to treat the disease. One having ordinary skill in the art would have been motivated to treat Parkinson's disease by administering to a subject in need of treatment the composition of Nguyen where the modafinil dose is 50 mg to 1000 mg because Lafon teaches that the dose of modafinil administered to humans varies from 50 mg to 1000 mg.

9. Claims 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grebow et al. (US 5,618,845,) in view of Lafon (US 4,927,855).

Grebow is discussed under 35 USC 102. Grebow also suggests that modafmil is known to be used in the art for treating Alzheimer (column 10, lines 40-44). Grebow discloses in the background section at column 1, lines 61-64, that the levorotatory form of modafinil is used to treat other diseases including Alzheimer. Grebow does not however disclose a pharmaceutical composition that comprises the levorotatory form of modafinil. But since Grebow specifically discloses that modafinil can be used to treat Alzheimer and Lafon discloses that the levorotatory form of modafinil is useful in the treatment of Alzheimer (abstract), it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare the pharmaceutical composition of Grebow and use it to treat Alzheimer. One having ordinary skill in the art would have been motivated by Lafon to prepare the composition of Grebow with the levorotatory form of modafinil and use the preparation to treat Alzheimer with the expectation that as disclosed by Lafon, the levorotatory modafinil would be effective in the treatment of Alzheimer.

Response to Arguments

10. Applicants' arguments filed 1/04/06 have been fully considered but they are not persuasive.

Applicants' argument that the emulsion of Grebow does not contain surfactant is not persuasive because emulsions by their nature contain surfactants/emulsifiers.

Applicants' argument that Nguyen does not disclose spontaneous formation of aqueous, homogeneous, stable composition is not persuasive because the claim 1 is directed to composition/product.

Applicants' traversal of Grebow under 35 USC 103, as it regards to Grebow's failure to teach surfactants, is not persuasive because emulsions contain emulsifiers, for example, milk contains emulsifiers.

Applicants' traversal of Nguyen in view of Lafon under 35 USC 103 as it regards to spontaneous formation of aqueous, homogeneous, stable composition is not persuasive because the claims are directed to compositions. Lafon is relied upon for disclosure that Modafinil is used to treat Parkinson disease and not on the form of the modafinil.

Applicants argue that Lafon does not cure the deficiencies of Grebow, under 35 USC 103, because Grebow is not relied upon for teaching forms of the modafinil; however, the argument is persuasive because Grebow discloses modafinil containing emulsion.

Double Patenting

The terminal disclaimer filed 01/04/06 overcomes the obviousness type double patenting. rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Blessing Fubara
Patent Examiner
Tech. Center 1600